

## Special Issue

### ACREMONIUM/GRASS INTERACTIONS

#### CONTENTS

<b>Introduction</b> .....	<b>1</b>
Importance and economic significance of the <i>Acremonium</i> endophytes to performance of animals and grass plant C.S. Hoveland (Athens, GA, USA) .....	<b>3</b>
Taxonomy, life cycle, reproduction and detection of <i>Acremonium</i> endophytes J.F. White, Jr. (Montgomery, AL, USA), G. Morgan-Jones (Auburn, AL, USA) and A.C. Morrow (Montgomery, AL, USA) .....	<b>13</b>
The ecology and evolution of endophytes K. Clay (Bloomington, IN, USA) .....	<b>39</b>
Chemistry of compounds associated with endophyte/grass interaction: ergovaline- and ergopeptine-related alkaloids G.B. Garner, G.E. Rottinghaus, C.N. Cornell and H. Testereci (Columbia, MO, USA) .....	<b>65</b>
Chemistry, occurrence and biological effects of saturated pyrrolizidine alkaloids associated with endophyte-grass interactions L.P. Bush, F.F. Fannin, M.R. Siegel, D.L. Dahlman and H.R. Burton (Lexington, KY, USA) .....	<b>81</b>
Lolitrems, peramine and paxilline: mycotoxins of the ryegrass/endophyte interaction D.D. Rowan (Palmerston North, New Zealand) .....	<b>103</b>
Abiotic stress tolerances (moisture, nutrients) and photosynthesis in endophyte-infected tall fescue C.W. Bacon (Athens, GA, USA) .....	<b>123</b>
Physiological interactions of endophytic fungi and their hosts. Biotic stress tolerance imparted to grasses by endophytes G.C.M. Latch (Palmerston North, New Zealand) .....	<b>143</b>
Perennial ryegrass ( <i>Lolium perenne</i> ) endophyte ( <i>Acremonium lolii</i> ) relationships: the Australian experience P.J. Cunningham, J.Z. Foot and K.F.M. Reed (Hamilton, Vic., Australia) .....	<b>157</b>
Molecular genetics of <i>Epichloë typhina</i> and <i>Acremonium coenophialum</i> C.L. Schardl and M.R. Siegel (Lexington, KY, USA) .....	<b>169</b>
Genetic manipulation of tall fescue J.F. Pedersen (Lincoln, NE, USA) and D.A. Sleper (Columbia, MO, USA) .....	<b>187</b>
Transmission and survival of <i>Acremonium</i> and the implications for grass breeding M.A.M. Do Valle Ribeiro (Carlow, Ireland) .....	<b>195</b>
Importance of <i>Acremonium</i> endophytes in turf-grass breeding and management C.R. Funk (New Brunswick, NJ, USA), R.H. White (Raleigh, NC, USA) and J.B. Breen (New Brunswick, NJ, USA) .....	<b>215</b>
Effects of endophyte-infected tall fescue on animal performance S.P. Schmidt and T.G. Osborn (Auburn, AL, USA) .....	<b>233</b>
Pathophysiology of fescue toxicosis F.N. Thompson (Athens, GA, USA) and J.A. Stuedemann (Watkinsville, GA, USA) .....	<b>263</b>
Causes and control of perennial ryegrass staggers in New Zealand R.A. Prestidge (Hamilton, New Zealand) .....	<b>283</b>
<i>Acremonium</i> endophytes: our current state of knowledge and future directions for research M.R. Siegel (Lexington, KY, USA) .....	<b>301</b>
<b>Author Index</b> .....	<b>323</b>